



Bansilal Ramnath Agarwal Charitable Trust's
VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37
(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

Academic Year 2023 – 24, Semester I

Assessment Details – S.Y., T.Y. and Final year B.Tech.

I. Courses with Theory, Lab and Tutorial

| Sr. No. | Type of Assessment | Conduction | Marks |
|---------|--|-------------------------|---|
| 1 | Presentation / Group Discussion / Home Assignment | Week 4,5,6,and 7 | 30 Marks assessment (Part A) |
| 2 | Presentation / Group Discussion / Home Assignment | End Semester Assessment | 70 Marks assessment (Part B) Total 100 Marks (Part A + Part B) converted to 20 equivalent Marks |
| 3 | Laboratory Experiments | During Laboratory turns | 100 Marks converted to 10 equivalent Marks |
| 4 | Course Project | End Semester Assessment | 100 Marks converted to 20 equivalent Marks |
| 5 | Written Examination / Multiple Choice Questions | End Semester Assessment | 60 Marks converted to 30 equivalent Marks |
| 6 | Comprehensive Viva Voce | End Semester Assessment | 100 Marks converted to 20 equivalent Marks |

II. Courses with Practical Examination activity

| Sr. No. | Type of Assessment | Conduction | Marks |
|---------|-------------------------|-------------------------|--|
| 1 | Laboratory work | During laboratory turns | 100 Marks converted to 10 equivalent Marks |
| 2 | Course Project | End Semester Assessment | 100 Marks converted to 20 equivalent Marks |
| 3 | Practical | End Semester Assessment | 100 Marks converted to 50 Marks |
| 4 | Comprehensive Viva Voce | End Semester Assessment | 100 Marks converted to 20 equivalent Marks |

Note: Department wise list of courses is given separately in this document in Part IX.

III. Final year B.Tech. Courses

| Sr. No. | Type of Assessment | Conduction | Marks |
|---------|-------------------------|-----------------|--|
| 1 | MCQ Exam – Section I | Mid Semester | 30 Marks converted to 30 equivalent Marks |
| 2 | Home Assignment | End of Semester | 100 Marks converted to 10 equivalent Marks |
| 3 | MCQ Exam – Section II | End of Semester | 30 Marks converted to 30 equivalent Marks |
| 4 | Comprehensive Viva Voce | End of Semester | 100 Marks converted to 30 equivalent Marks |

IV. S.Y. B. Tech. 2 Credit Theory Courses

| Sr. No. | Type of Assessment | Conduction | Marks |
|---------|---------------------|-----------------|---|
| 1 | Written Examination | End of Semester | 100 Marks converted to 100 equivalent Marks |

V. EDI, Major Project & Semester Internship

| Sr. No. | Type of Assessment | Conduction | Marks |
|---------|--|--------------|--|
| 1 | Project / Internship activity Presentation | Mid Semester | 50 Marks converted to 30 equivalent Marks |
| 2 | Project/ Internship activity Presentation & Demonstration | End Semester | 100 Marks converted to 70 equivalent Marks |



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Assessment Rubrics

I. Presentation Assessment

Details of Assessment – 100 Marks to be converted to 20 Marks.

Partial assessment to be conducted during the 4th, 5th, 6th, and 7th week of the Academic Semester for 50 marks

Format for Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Survey about the topic | 15 |
| 2 | Contents of slides | 15 |
| 3 | Technical content coverage & Presentation Skills | 20 |
| | TOTAL | 50 |

50 marks to be converted to 30

AND

Summative assessment to be conducted during End of the Academic Semester for 100 marks

Format for Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Contents of slides | 25 |
| 2 | Understanding of concepts | 25 |
| 3 | Presentation Skills | 25 |
| 4 | Performance in Question-and-Answer Session | 25 |
| | TOTAL | 100 |

100 Marks to be converted to 70 marks

NSQF Compliance:

Compatibility and Assurance of imparting Level 6 and Level 7 skills as per National Skills Quality Framework (NSQF) Guidelines.



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II. Group Discussion

Details of Assessment – 100 Marks to be converted to 20 Marks.

Partial assessment to be conducted during the 4th, 5th, 6th, and 7th week of the Academic Semester for 50 marks

Format for Assessment

| Sr. No. | Parameter | Marks |
|---------|--|-----------|
| 1 | Survey about the topic | 15 |
| 2 | Technical content coverage during discussion | 20 |
| 3 | Ability to express technical views | 15 |
| | TOTAL | 50 |

50 Marks to be converted to 30 marks

AND

Summative assessment to be conducted during End of the Academic Semester for 100 marks

| Sr. No. | Parameter | Marks |
|---------|------------------------------------|------------|
| 1 | Level of Participation | 25 |
| 2 | Knowledge of the Topic | 15 |
| 3 | Communication skill and Vocabulary | 25 |
| 4 | Critical Thinking | 25 |
| 5 | Overall Impression of Examiner | 10 |
| | TOTAL | 100 |

100 Marks to be converted to 70 marks

Guidelines for assessment:

- a. **Level of Participation:** The student has enthusiastically demonstrated that the knowledge of the topic acquired from Theory, Tutorial, Laboratory, Project, Supplementary reading is reflected in the statements and arguments made during the Group Discussions. Has been an active orator and a passive listener at appropriate times during the course of the Group Discussion
- b. **Knowledge of the Topic:** The student is thorough in the content and concepts associated with the fundamental and applied aspects of the Topic. The participant contributed to clarify or synthesize other Group Discussion members' ideas. If disagreeing with other Group Discussion members' ideas, the student stated disagreement or objections consistent with the underlying technical concept clearly, yet politely.
- c. **Communication skill and vocabulary:** The student effectively and politely communicated with the peers and the Moderator faculty, articulating the thoughts using appropriate Academic and Technical words. The student avoided the use of mixed or non-English vocabulary
- d. **Critical Thinking:** The student is able to think clearly, and rationally and is able to logically connect various aspects of the topic being discussed. The student retained the ability to reason and stay focused, despite distractions, clutter and diversion experienced, if any, during the progress of the Group discussion. The student was able to think about the facts that emerged during the Group Discussion spontaneously. This ability is not the ability acquired by accumulation of facts and knowledge learned once in the past and used for ever.

Overall impression of the moderator faculty: The moderator faculty would quantify their impression on the basis of parameters such as, but not limited to - Time management, response and respect to peers and moderator faculty, ethics followed, arguments and counter arguments losing the decorum of the activity etc.

NSQF Compliance:

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III. EDI Assessment

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

Format for Mid Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|---|--------------|
| 1 | Problem Statement | 10 |
| 2 | Literature Review | 10 |
| 3 | Group formation and identification of individual responsibility | 10 |
| 4 | Objective of Project activity | 10 |
| 5 | Knowledge of domain, technology and tools being used | 10 |
| | TOTAL | 50 |

Format for End Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|---|--------------|
| 1 | Realization of project as per problem statement | 10 |
| 2 | Design & Testing | 30 |
| 3 | Documentation and Report Writing | 20 |
| 4 | Quality of Work | 15 |
| 5 | Performance in Question & Answers Session | 15 |
| 6 | Timely Completion of Project work | 10 |
| | TOTAL | 100 |

NSQF Compliance:

Compatibility and Assurance of imparting Level 8 and Level 9 skills as per National Skills Quality Framework (NSQF) Guidelines.



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IV. Final Year B.Tech. Major Project

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

Format for Mid Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Problem Statement | 10 |
| 2 | Literature Review | 10 |
| 3 | Group formation and identification of individual responsibility | 10 |
| 4 | Objective of Project activity | 10 |
| 5 | Knowledge of domain, latest technology and modern tools being used | 10 |
| | TOTAL | 50 |

Format for End Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Realization of project as per problem statement | 10 |
| 2 | Design, Testing / Experimentation, Analysis / Validation | 30 |
| 3 | Documentation and Report Writing | 20 |
| 4 | Quality of Work | 15 |
| 5 | Performance in Question & Answers Session | 15 |
| 6 | Regular interaction with guide | 10 |
| | TOTAL | 100 |

NSQF Compliance:

Compatibility and Assurance of imparting Level 8,9 and Level 10 skills as per National Skills Quality Framework (NSQF) Guidelines.



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V. Final Year Semester Internship

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

Format for Mid Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Problem Statement | 10 |
| 2 | Literature Review | 10 |
| 3 | Clarity about the objectives of Internship activity | 10 |
| 4 | Requirement Analysis, Internship Planning | 10 |
| 5 | Knowledge of domain, Latest technology and modern tools being used | 10 |
| | TOTAL | 50 |

Format for End Semester Assessment

| Sr. No. | Parameter | Marks |
|----------------|--|--------------|
| 1 | Realization of Internship as per problem statement | 10 |
| 2 | Design, Testing / Experimentation, Analysis / Validation | 30 |
| 3 | Documentation and Report Writing | 20 |
| 4 | Quality of Work | 15 |
| 5 | Performance in Question & Answers Session | 15 |
| 6 | Regular interaction with guide | 10 |
| | TOTAL | 100 |

Note: For the End Semester Assessment, it is expected that the Internship company guide is also involved. The Department is required to set up communication with the Internship company guide regarding the End Semester Assessment, requesting their availability, in the interest of fair and rigorous assessment. No remuneration is to be paid to Internal company guide. They are expected to be involved along with Examiner/s in the finalization of Marks. The participation from the Internship company guide is voluntary. If the company guide opts not to join the assessment activity, it may then be done by the appointed examiner/s only.

NSQF Compliance:

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VI. Home Assignment

1. End Semester Assessment – 100 Marks to be converted to 20 Marks.

Format for End Semester Assessment

Home Assignment Type: Design

| Sr. No. | Parameter | Marks |
|---------|---|------------|
| 1 | Design Statement: Novelty, Originality and concreteness | 15 |
| 2 | Understanding of Design | 30 |
| 3 | Engineering approach towards design | 25 |
| 4 | Communication and presentation skills | 10 |
| 5 | Design report, writeup, conclusion of Assignment | 20 |
| | TOTAL | 100 |

Home Assignment Type: Survey

| Sr. No. | Parameter | Marks |
|---------|--|------------|
| 1 | Comprehensiveness of the survey | 15 |
| 2 | Understanding of survey topic | 20 |
| 3 | Significance and relevance of survey findings | 25 |
| 4 | Communication and presentation skills | 10 |
| 5 | References, Bibliography, literature survey | 10 |
| 6 | Survey report, writeup, conclusion of Assignment | 20 |
| | TOTAL | 100 |

Home Assignment Type: Blog

| Sr. No. | Parameter | Marks |
|---------|--|------------|
| 1 | Comprehensiveness and overall coverage of the blog | 20 |
| 2 | Understanding of the blog topic | 20 |
| 3 | Ease of understanding of the blog for the reader | 25 |
| 4 | Aesthetic elements of blog and Originality of blog content | 25 |
| 5 | References, Bibliography, literature survey | 10 |
| | TOTAL | 100 |

Home Assignment Type: Case Study

| Sr. No. | Parameter | Marks |
|---------|--|------------|
| 1 | Clarity in definition of case study problem statement | 10 |
| 2 | Understanding of Case handled, tools and technology used | 30 |
| 3 | Approach of analysis of case | 25 |
| 4 | Significance and relevance of findings | 25 |
| 5 | References, Bibliography, literature survey | 10 |
| | TOTAL | 100 |

NSQF Compliance:

Compatibility and Assurance of imparting Level 6 and Level 7 skills as per National Skills Quality Framework (NSQF) Guidelines.



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VII. Comprehensive Viva Voce

1. End Semester Assessment – 100 Marks to be converted to 20 Marks.

Guidelines for assessment:

- The CVV enables a dialectic communication between the examiner/s and the student, providing invaluable experience for career interviews in future.
- The Comprehensive Viva Voce is a summative assessment. It is based on verbal interaction between Examiner/s and the students, covering the entire course contents.
- The student may be encouraged to explain the applicable concepts, ideas, views with the help of pen and paper/ Whiteboard screen/ Paint etc. if required.
- A balanced set of questions invoking diverse abilities such as analysis, synthesis, application, comparison, correlation, summary, classification, explanation, illustration, description etc. be set up, while covering entire course contents.
- Sufficient time is to be given for every student during the Viva Voce, to demonstrate the requisite abilities before arriving at the summative assessment score.

NSQF Compliance:

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VIII. Design Thinking

Scope:

Applicable for S.Y. B.Tech. and T.Y. B.Tech. students as group activity

Objective:

To provide ecosystem to students for paper publication and patent filing

Outcome:

Publication of paper or filing of patent

Assessment and Grading:

Students will be assessed on the basis of the outcome, i.e., published paper or status of patent. Grades to be awarded at the end of the Semester will be on the following basis –

| Grade | Basis for Grade allocation |
|--------------|---|
| A+ | Paper published in High impact Journals (Top 50 journal list will be given) / Patent Granted |
| A | Paper published in any SCI/Scopus/Web of science Journal/conference or Patent Published |
| B+ | Paper Accepted for publication in SCI/Scopus/Web of science Journal/conference or patent filed |
| B | Paper published in UGC Listed Journal |
| C+ | International Conference Paper Publication (Non-Scopus and Non-SCI) |
| C | National Conference Paper Publication (Non-Scopus and Non-SCI) |
| D | Paper submitted to any Journal / Conference |
| F | No publication / No patent |

NSQF Compliance:

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IX. Courses with Practical Examination activity

| Program | Course Code | Course Name |
|---------------------|-------------|-------------------------------------|
| IT | IT 2265 | Advanced Data Structures |
| | IT 2266 | Computer Networks |
| | IT 3221 | Operating System |
| | IT 3218 | Artificial Intelligence |
| AI & DS | AI 2003 | Computer Network |
| | AI 2001 | Advanced Data Structures |
| | AI 3001 | Artificial Intelligence |
| | AI 3002 | Operating System |
| Computer | CS 2041 | Advanced Data Structures |
| | CS 2008 | Operating System |
| | CS 3215 | Web technology |
| | CS 3202 | Artificial Intelligence |
| E & TC | ET 2270 | Advanced Data Structure |
| | ET 3272 | Design and Analysis of Algorithm |
| | ET 3221 | Computer Vision |
| | ET 3271 | Embedded System Design |
| | ET 3273 | Web Technology |
| CS – AI | CI 2001 | Advanced Data Structures |
| | CI 2003 | Operating Systems |
| CS – AIML | ML 2006 | Advanced Data Structures |
| | ML 2008 | Operating Systems |
| IPED | Nil | Nil |
| Mechanical | Nil | Nil |
| Instrumentation | IC 2222 | Advanced Data Structure |
| | IC 3232 | Web Technologies |
| Chemical | Nil | Nil |
| SY Common (DOME) | CS 2218 | Object Oriented Programming Systems |

NSQF Compliance:

Compatibility and Assurance of imparting Level 7 in the domain of Process, Professional Knowledge, Professional Skill and Core Skill as per National Skills Quality Framework (NSQF) Guidelines.


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Dean - Academics